



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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February 12, 2018

Ms. Keri Fitzpatrick  
Prolerized New England Co., LLC  
69 Rover Street  
Everett, MA

**RE: Everett-**  
Transmittal No.: X267680  
Application No.: NE-15-014  
Class: *SM-25*  
FMF No.: 110842  
**CONDITIONAL PLAN APPROVAL**

Dear Ms. Fitzpatrick:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Non-major Comprehensive Plan Application ("Application") listed above. This Application concerns the proposed installation and operation of an air pollution capture and control system for an existing 9,000 horsepower Riverside metal shredder located at 69 Rover Street in Everett, Massachusetts ("Facility"). The Application bears the seal and signature of Kelley Cronin Begin, Massachusetts Registered Professional Engineer Number 45857.

This Application dated November 19, 2015 and supplemental information provided on July 18, 2016 were submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control" regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-N, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Conditional Plan Approval** for said Application, as submitted, subject to the conditions listed below.

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Please review the entire Conditional Plan Approval, as it stipulates the conditions with which the Facility owner/operator (“Permittee”) must comply in order for the Facility to be operated in compliance with this Conditional Plan Approval.

## **1. DESCRIPTION OF FACILITY AND APPLICATION**

### **Process Description**

Prolerized New England Company, LLC (“PNE” or the “Permittee”) owns and operates a metals recycling facility at 69 Rover Street, Everett, MA (the “Facility”). The Permittee receives vehicles, heavy iron, light iron and appliances such as washing machines and ovens for shredding and recycling. Material is loaded onto a conveyor belt and is fed into the electrically driven 9,000 horsepower Riverside Model M-122 Shredder for shredding. The shredder has a design capacity of 300 tons per hour (tph) with an actual average throughput of 265 tph. The shredder consists of multiple hammers that reduce the material feed into pieces of approximately 4 inches or less. During the shredding process, the Permittee injects an aqueous surfactant into the shredder to reduce the heat and contain some particulates generated from this process. Once shredded, material is passed over magnets to separate ferrous from non-ferrous material. The ferrous material is split into two streams and routed through Z-box separators for further sorting to remove any non-ferrous material. The sorted ferrous material is stockpiled and eventually transported off-site, primarily by cargo ship. The non-ferrous material is sent to the “non-ferrous raw” pile and is stored and stockpiled in a Quonset hut, and ultimately sent to the Facility’s on-site Joint Products Plant (JPP) for recovery of additional metals for recycling.

### **Description of Air Pollution Capture and Control Devices for Shredding Operations**

The Permittee proposes to capture and control emissions generated during the existing shredding process (see Figure 1 below). This Application has been submitted as a result of a Consent Judgment in the Matter of Commonwealth v. Metal Recycling, LLC, et al. (Suffolk Superior Court) Superior Court Civil Action No. 15-2880 entered on September 24, 2015. The Permittee is proposing a pollutant capture system (PCS) consisting of a shredder enclosure designed through an engineering process that applies the design criteria consistent with USEPA Method 204 Permanent Total Enclosure Criteria (as set forth in 40 CFR Part 51, Appendix M, Test Method 204) to minimize the enclosure’s draft openings, and an extraction vent system that operates at a sufficient flow rate to promote air flow into the enclosure to sufficiently capture pollutants emanating from the shredder.

Once captured, the emissions will enter a dropout box, designed to remove the larger particulate matter that may be generated by the shredding process protecting the air pollution control devices downstream of the shredder. After exiting the dropout box, the effluent gas is divided into two parallel gas streams and are conveyed to identical air pollution control trains. Each effluent stream will travel to its own venturi scrubber with cyclonic separator. The venturi scrubbers are designed to remove ninety nine percent (99%) of particulate matter (PM), based on estimated uncontrolled PM emissions. The venturi scrubbers will have a manually adjustable

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throat damper to control pressure drop, a “90 degree flooded elbow” at the bottom of the venturi exhaust to minimize abrasion, and removable liquid distributors. The venturi scrubbers will employ water as the scrubbing liquid. The makeup rate, blowdown rate, and water recirculation rate will be determined during the start-up of the venturi scrubber systems and verified during compliance testing. The blowdown water will be reused in the shredder; however, the Permittee may consider options to treat and discharge to the local sewer. The Permittee shall continuously monitor the differential pressure and water recirculation flow rate of the venturi scrubbers. These parameters represent Critical Operating Parameters (COPs) for the venturi scrubbers. The COPs and other venturi scrubber operating parameters will be defined in the Standard Operation and Maintenance Procedures (SOMP) and monitored and recorded.

The effluent gas streams leave the venturi scrubbers and are directed to their respective regenerative thermal oxidizer (RTO). The RTOs are designed to control a minimum of ninety eight percent (98%) of the volatile organic compounds (VOCs) generated from the operation of the shredder. Each RTO will be equipped with an external Maxon (or equivalent) burner with a heat input of 16.184 million British thermal units per hour (MMBtu/hr) and will fire natural gas only. The minimum combustion chamber operating temperature for each RTO shall be 1600 degrees Fahrenheit (°F), with a minimum residence time of one (1) second in the combustion chamber. The Permittee may request a lower minimum operating temperature based on an evaluation of operating conditions and as demonstrated by compliance testing. The Permittee shall continuously monitor the combustion chamber operating temperature of both RTOs. Combustion chamber operating temperature is the COP for the RTOs. The COP and other RTO operating parameters will be defined in the SOMP and monitored and recorded. An Allen Bradley (or equivalent) programmable logic controller (PLC) will be employed to ensure proper operation of the RTOs and allow for remote diagnostics. In order to maintain temperatures between the two ceramic beds, gas flow direction will be changed approximately every 4-5 minutes by automatic poppet valves such that heat is transferred from the hot air back to the ceramic bed before exiting the RTOs at an estimated temperature of approximately 165 °F.

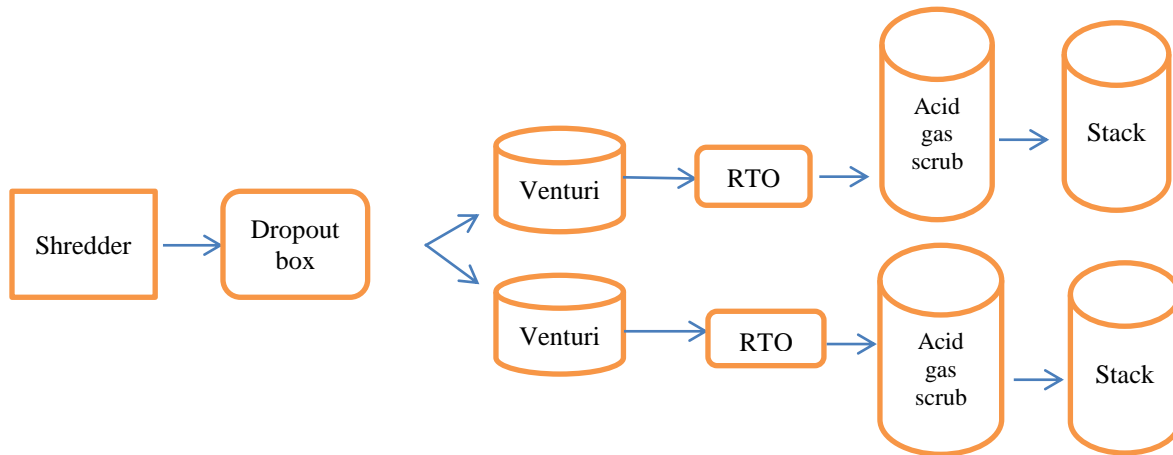
After exiting the RTO, the effluent gas will be “quenched” to cool the gases to approximately 105 °F prior to entering the packed bed scrubbers.

The last air pollution control device in each treatment train is a packed bed scrubber. The multi-stage packed bed scrubbers are designed to achieve ninety-eight percent (98%) control of the acid gases that will be present in the exhaust leaving the RTOs. These scrubbers are countercurrent, vertical packed design with a polypropylene mesh pad mist eliminator. A water and sodium hydroxide (NaOH) solution will be used as scrubbing liquid and will react with the acid gases to generate neutral salts. The Permittee shall monitor the differential pressure, scrubbing solution pH, and recirculation rate. These parameters represent COPs for the packed bed scrubbers. The COPs and other packed bed scrubber operating parameters will be defined in the SOMP and monitored and recorded. The pH range of the scrubbing solution is anticipated to be between 7 and 10, with the recirculation rate to be determined during compliance testing.

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### **Stack Description and Monitoring of Stack Emissions**

Treated exhaust gases will exit two identical 72-inch diameter stacks that are each 55 feet tall. The Permittee shall ensure that the Facility is constructed and maintained to accommodate the emissions (compliance) testing requirements contained herein and for additional emissions testing that may be required in the future. The Permittee shall install and operate a temporary continuous emissions monitoring system (TCEMS) to monitor VOC emissions. The TCEMS shall be operated for approximately sixty (60) days during air pollution control system optimization and compliance emissions testing. The TCEMS shall meet the United States Environmental Protection Agency's performance specifications under 40 CFR Part 60, Appendix B & F. The Permittee shall install and maintain a data acquisition and handling system (DAHS) to record and maintain all data monitored by the TCEMS, the PCS gas flow monitoring system, and COPs for air pollution control systems.



**Figure 1: General Overview of air pollution control devices**

The Permittee shall install and operate a parametric monitoring system that collects operational data of all air pollution control devices during the same timeframe as the TCEMS and emissions testing are conducted. The data will then be analyzed and used to develop a parametric monitoring program to establish an acceptable range(s) of COPs for each air pollution control device that serves the shredder. The Permittee shall meet the requirements of 40 CFR 60 Appendix A, Method 1 for test ports at the stack. Additional ports shall be installed before and after each air pollution control device at locations to be reviewed and approved by MassDEP.

### **Material Process Rates and Limitations**

The Permittee shall restrict the processing rate of the shredder to no more than 990,000 tons per rolling 12-month period and no more than 223,000 tons per month (TPM) of material to be shredded until such time that the air pollution control equipment is installed and is operational.

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Once the air pollution control trains are fully operational, the Permittee may process raw materials at a rate of 2,628,000 000 tons per rolling 12-month period and 223,000 TPM.

### **Particulate Matter Control Plan**

As a result of the Consent Judgment referenced above, the Permittee was required to submit a Particulate Matter Control Plan (“PM Control Plan”) to MassDEP for review and written approval. The PM Control Plan was received by MassDEP on November 19, 2015. The PM Control Plan describes PM generating activities at the Facility, and proposes control measures to be implemented to address fugitive dust and particulate emissions generated during all phases of Facility operations. MassDEP’s Approval of the PM Control Plan, contained herein as Attachment 1, describes actions the Permittee must take to control PM and/or dust migration off-property.

## **EMISSION UNIT IDENTIFICATION**

All Emission Units (“EU”) identified in Table 1 are subject to and regulated by this Conditional Plan Approval:

<b>Table 1</b>			
<b>EU</b>	<b>Description</b>	<b>Design Capacity</b>	<b>Pollution Control Device (PCD)</b>
1	Existing Riverside M-122 Shredder	300 tons per hour	Drop-out box for PM control (PCD-1)  Venturi Scrubbers for PM control (PCD-2a and PCD-2b)  Regenerative Thermal Oxidizers for VOC control (PCD-3a and PCD-3b)  Packed-Bed Scrubbers, for acid gas control (PCD-4a and PCD-4b)
Facility-Wide	Fugitive Dust Generation	N/A	PM Control Plan

### **Table 1 Key:**

EU = Emission Unit  
VOC = volatile organic compounds  
PM = particulate matter

PCD = pollution control device  
N/A = not applicable

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## **APPLICABLE REQUIREMENTS**

### **A. OPERATIONAL, PRODUCTION and EMISSION LIMITS**

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

<b>Table 2</b>			
<b>EU</b>	<b>Operational / Production Limit</b>	<b>Air Contaminant</b>	<b>Emission Limit</b>
1	<b>Interim Operational Limits (prior to installation of PCDs):</b> Infeed shredder rate shall be: < 990,000 tons per rolling twelve month period <u>and</u> < 223,200 tons per month.  <b>Final Operational Limits (with PCDs):</b> Infeed shredder rate shall be: < 2,628,000 tons per rolling twelve month period <u>and</u> < 223,200 tons per month.  <b>Minimum operating temperature of Regenerative Thermal Oxidizers (RTOs)</b> $\geq 1600^{\circ}\text{F}^2$  <b>Packed bed scrubbing solution pH <math>\geq 7</math> and <math>\leq 10</math></b>	PM <sup>1</sup>	$\leq 0.40$ lb/hr $\leq 0.14$ TPM $\leq 1.7$ TPY
		VOC <sup>1</sup>	$\leq 0.6$ lb/hr $\leq 0.22$ TPM $\leq 2.6$ TPY <25 ppm as methane
		HAPS <sup>1</sup>	< 5 TPY for a single HAP < 10 TPY for total HAPS
		Acid Gases <sup>1</sup>	< 2ppm total HCl and HF
		Opacity	$\leq 5\%$
Facility-Wide	N/A	Opacity	$\leq 5\%$
		Smoke	< No. 1 of Chart <sup>3</sup>

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**Table 2 Key:**

EU = Emission Unit	$\leq$ = less than or equal to
$<$ = less than	$>$ = greater than
$\geq$ = greater than or equal to	TPM = tons per month
ppm = parts per million	% = percent
PM = total particulate matter	PM <sub>10</sub> = particulate matter less than or equal to 10 microns in diameter
PM <sub>2.5</sub> = particulate matter less than or equal to 2.5 microns in diameter	VOC = volatile organic compounds
HAP (single) = maximum single hazardous air pollutant	HAP (total) = total hazardous air pollutants
TPY = tons per consecutive 12-month period	PCD = pollution control device(s)
°F = degrees Fahrenheit	pH = quantitative measure of the acidity or basicity of liquid solutions

1. Emission limits are estimates only based on available data. Emission limits shall be finalized based on compliance testing after installation of the pollution control equipment.
2. The Permittee may request a lower operating temperature of the RTOs based on an evaluation of operating conditions and as demonstrated by compliance testing.
3. Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by the Department.

**B. COMPLIANCE DEMONSTRATION**

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

<b>Table 3</b>	
<b>EU</b>	<b>Monitoring and Testing Requirements</b>
1	1. The Permittee shall monitor the date and time that the shredder is in operation.
	2. The Permittee shall estimate the amount of infeed into the shredder based on shredder output measured on a daily basis and ferrous yield factor of 0.7 (Infeed = Output/0.7).

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<b>Table 3</b>	
<b>EU</b>	<b>Monitoring and Testing Requirements</b>
1	3. The Permittee shall demonstrate that the pollutant capture system (PCS) has been constructed to minimize the enclosure's draft openings, and the extraction vent system operates at a sufficient flow rate to promote air flow into the enclosure to sufficiently capture pollutants emanating from the shredder, consistent with USEPA Method 204 Permanent Total Enclosure Criteria (as set forth at 40 CFR Part 51, Appendix M, Test Method 204). The Permittee shall also monitor to verify that the PCS is continuously maintained under negative pressure. The Permittee shall measure the total system air flow rate, or equivalent, to aid in the establishment of a parametric monitoring program COP for the PCS.
	4. The Permittee shall install, operate, calibrate and maintain a monitoring device to monitor the pressure drop across each venturi scrubber on a continuous basis.
	5. The Permittee shall install, operate, calibrate and maintain a monitoring device to continuously monitor to ensure that each venturi scrubber solution is recirculating at all times the unit(s) is/are in operation. The scrubbing solution flow monitors shall be connected to a visible and audible alarm to alert operator if scrubber solution flow is out of range.
	6. The Permittee shall install, operate, calibrate and maintain a monitoring device to monitor operations of each RTO to ensure that the minimum required combustion chamber temperature is achieved prior to feeding material into the shredder and ensure this minimum temperature is maintained at all times while material is being fed into and processed by the shredder. Both audible and visual alarms shall be used to indicate the need to initiate corrective actions and/or discontinue operation of the shredder infeed conveyor.
	7. The Permittee shall install, operate, calibrate and maintain a monitoring device to monitor the pressure drop across each packed bed scrubber on a continuous basis.
	8. The Permittee shall install, operate, calibrate and maintain a pH monitor to continuously monitor the pH of the scrubbing liquid of each packed bed scrubber.
	9. The Permittee shall install, operate, calibrate and maintain a flow meter to continuously monitor the flowrate, in gallons per minute, of the recirculation solution of each packed bed scrubber.



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<b>Table 3</b>	
<b>EU</b>	<b>Monitoring and Testing Requirements</b>
1	10. The Permittee shall monitor all operations for each air pollution control device, and the associated COPs. COPs shall include: fan speed and negative pressure monitoring for the PCS, pressure drop and recirculation rate for venturi scrubbers; combustion chamber operating temperature for RTOs; and scrubbing solution pH, pressure drop and water recirculation rate for acid gas scrubbers. The Permittee will employ a master PLC to integrate COP setpoints of each control device and shall alarm, both visually and audibly, when operations are outside acceptable COP set point ranges. The Permittee shall demonstrate to MassDEP that all air pollution control devices are continuously operated and in compliance with the emission limits contained in Table 2 above.
	11. Compliance testing shall be performed within sixty (60) days of continuous operation of the pollutant capture, control, and monitoring systems. Test ports shall be installed in accordance with 40 CFR Part 60 Appendix A Method 1 at the stacks. All compliance testing shall be conducted in accordance with USEPA Reference Test Methods, Regulation 310 CMR 7.13, and this Conditional Plan Approval. The dates and times for conducting the emission compliance test shall be coordinated with MassDEP personnel of this office for a mutually agreed upon schedule for testing.
	12. The Permittee shall install test ports prior to and after each PCD. These test ports shall be utilized for optimizing PCD performance.
	13. The Permittee shall monitor visible emissions from the two stacks serving the shredder. Visible observations shall be conducted on a daily basis when the equipment is operating and during daylight hours. If any visible emissions, exclusive of condensed water vapor, are observed, then the Permittee shall immediately take corrective actions and report observations to MassDEP in accordance with the Reporting Requirements contained in Table 5 of this Conditional Plan Approval, below.
	14. The Permittee shall inspect and perform all maintenance activities for all air pollution control devices in accordance with the manufacturers' recommendations.
Facility -wide	15. The Permittee shall monitor all PM and/or dust control activities performed in accordance with the PM Control Plan, for the control of PM and/or dust.
	16. The Permittee shall monitor materials entering the property in accordance with the Facility's most recent Scrap Acceptance Policy.
	17. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.

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<b>Table 3</b>	
<b>EU</b>	<b>Monitoring and Testing Requirements</b>
Facility -wide	18. If and when MassDEP requires, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.
	19. The Permittee shall complete a sound survey within one hundred eighty (180) days after the Facility has installed all required pollution control devices and completed a shakedown period.
	20. The Permittee shall monitor operations at the Facility to ensure compliance with the opacity and PM emission limits contained in Table 2 above. The Permittee shall make daily observations both on and off property. Observations shall be made during daylight hours. If any visible emissions are observed, then the Permittee shall immediately take corrective actions to mitigate the emissions.
	21. The Permittee shall monitor Facility Operations by performing USEPA Method 22, or equivalent, to determine the compliance status with the Approved PM Control Plan and opacity limits contained in Table 2 above.

**Table 3 Key:**

EU = Emission Unit

CFR= Code of Federal Regulations

RTO = regenerative thermal oxidizer

DAHS = data acquisition and handling system

MassDEP = Massachusetts Department of  
Environmental Protection

PM = particulate matter

COPs = critical pollution control device operating  
parameters

pH = quantitative measure of the acidity or basicity of  
liquid solutions

USEPA = United States Environmental Protection  
Agency

PTE = permanent total enclosure

TCEMS = temporary continuous emissions monitoring  
system

VOC = volatile organic compounds

PCD = pollution control device

SOMP = standard operating and maintenance  
procedures

CMR = Code of Massachusetts Regulations

PCS = pollution capture system

PLC = Programmable Logic Controller

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<b>Table 4</b>	
<b>EU</b>	<b>Record Keeping Requirements</b>
1	1. The Permittee shall record the date and time that the shredder is in operation.
	2. The Permittee shall record the estimated amount of infeed into the shredder based on shredder output monitored on a daily basis to ensure that the amount of material processed complies with limits contained in Table 2 above. (Infeed = Output/0.70).
	3. The Permittee shall document that the pollutant capture system (PCS) has been constructed to minimize the enclosure's draft openings, and the extraction vent system operates at a sufficient flow rate to promote air flow into the enclosure to sufficiently capture pollutants emanating from the shredder, consistent with USEPA Method 204 Permanent Total Enclosure Criteria (as set forth at 40 CFR Part 51, Appendix M, Test Method 204).
	4. The Permittee shall maintain records of the fan speed for all fans serving the PCS on a continuous basis.
	5. The Permittee shall record the differential pressure of each venturi scrubber on a continuous basis.
	6. The Permittee shall continuously record, in gallons per minute, the recirculation liquid flow rate of each venturi scrubber.
	7. The Permittee shall use and maintain a digital data logger to continuously record the temperature in each combustion chamber of the RTOs. The temperature recording systems shall be in operation whenever the RTOs are in operation.
	8. The Permittee shall record the differential pressure of each packed bed scrubber on a continuous basis.
	9. The Permittee shall continuously record the pH of the scrubbing liquid of each packed bed scrubber.
	10. The Permittee shall continuously record the flowrate, in gallons per minute, of the recirculation solution of each packed bed scrubber.
	11. The Permittee shall record all instances when the PCS and/or an air pollution control device(s) deviates from normal COPs. The Permittee shall record details of the event, duration of the event, and which operating setpoint(s) deviated outside the normal range. The Permittee shall record all action(s) taken to address and resolve the deviation condition(s).

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<b>Table 4</b>	
<b>EU</b>	<b>Record Keeping Requirements</b>
1	12. The Permittee shall maintain a record of all malfunctions impacting air contaminant emission rate(s) from the approved shredder, PCS, PCDs, and all associated monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates, PCDs and/or monitoring equipment returned to compliance.
	13. The Permittee shall record all inspection and maintenance activities performed on the approved shredder, PCS, PCDs, and all associated monitoring equipment in accordance with manufacturer's recommendations. Records shall include, but are not limited to, the name of the person conducting the inspection and/or maintenance work, date and time of the inspection and/or maintenance work, results of the inspection and/or maintenance work, a description of any required repairs resulting from the inspection and the date the required repairs were completed.
	14. The Permittee shall maintain a record of the date of commencement of construction of the PCS and PCDs and the date of initial start-up of each.
	15. The Permittee shall record the results of the daily visible emissions from the two stacks serving the shredder. Records shall include, but are not limited to, stack designation, date and time of the observation, meteorological conditions at the time of the observation, name of person making the observation, location of person making the observation relative to the stack(s), and observation results. If any visible emissions, exclusive of condensed water vapor, are observed, then the Permittee shall record the observations and corrective action(s) taken to eliminate visible emissions from the stack(s) and the date and time the visible emissions was abated.
	16. The Permittee shall maintain the results of any Emissions Compliance Testing performed in accordance with 310 CMR 7.13, USEPA Reference Test Methods, and/or this Conditional Approval.
Facility-wide	17. The Permittee shall record all PM and/or dust control activities to demonstrate compliance with the PM Control Plan.

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<b>Table 4</b>	
<b>EU</b>	<b>Record Keeping Requirements</b>
Facility -wide	18. The Permittee shall record the results of daily opacity and PM observations. Records shall include at a minimum the date, time, name of person making observations, location of person making observations, meteorological conditions during daily observations, and the results of the observations. If any visible emissions are observed, then the Permittee shall record the corrective action(s) taken to eliminate visible emissions from the stack(s) and/or the operations conducted at the Facility, and the date and time the visible emission(s) were abated.
	19. The Permittee shall record any instances when material is not allowed onto the property because it did not comply with the Facility's Scrap Acceptance Policy.
	20. The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at <a href="http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping">http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping</a> .
	21. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	22. In accordance with 310 CMR 7.13, the Permittee shall maintain records of the results of any compliance emissions testing so that the reporting requirement in Table 5 of this Conditional Plan Approval can be met.
	23. The Permittee shall maintain records of sound survey protocol(s), sound survey data, and reports detailing sound survey results so that the reporting requirement in Table 5 of this Conditional Plan Approval can be met.
	24. The Permittee shall maintain a copy of this Conditional Plan Approval, underlying Application and the most up-to-date SOMP for the EU and PCDs approved herein on-site.
	25. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCDs and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.

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<b>Table 4</b>	
<b>EU</b>	<b>Record Keeping Requirements</b>
Facility-wide	26. The Permittee shall maintain a record of all malfunctions impacting air contaminant emission rates on the approved EU(s), PCDs and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	27. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	28. The Permittee shall maintain records required by this Conditional Plan Approval on-site for a minimum of five (5) years, unless otherwise stated.
	29. The Permittee shall make records required by this Conditional Plan Approval available to MassDEP and USEPA personnel upon request.

**Table 4 Key:**

EU = Emission Unit  
PCD = pollution control device  
USEPA = United States Environmental Protection Agency  
CFR = Code of Federal Regulations  
RTO = regenerative thermal oxidizer  
PM = particulate matter  
COPs = critical pollution control device operating parameters

PCS = pollutant capture system  
SOMP = standard operating and maintenance procedure  
MassDEP = Massachusetts Department of Environmental Protection  
PTE = permanent total enclosure  
CMR = Code of Massachusetts Regulations

<b>Table 5</b>	
<b>EU</b>	<b>Reporting Requirements</b>
1	1. Except as otherwise provided, the Permittee shall send all submittals required by this Conditional Plan Approval to: Permit Chief, MassDEP – Northeast Regional Office, 205B Lowell Street, Wilmington, MA 01887.
	2. The Permittee shall submit a written test protocol for review and approval at least sixty (60) days prior to the commencement of any compliance testing. This test protocol shall describe the test methodologies to be employed during the required Emissions Compliance Testing.

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<b>Table 5</b>	
<b>EU</b>	<b>Reporting Requirements</b>
1	3. The Permittee shall submit an Emissions Compliance Testing Report for review and approval within sixty (60) days of the completion of Emissions Compliance Testing.
	4. The Permittee shall submit at least sixty (60) days prior to Emissions Compliance Testing documentation that the pollutant capture system (PCS) has been constructed to minimize the enclosure's draft openings, and the extraction vent system operates at a sufficient flow rate to promote air flow into the enclosure to sufficiently capture pollutants emanating from the shredder, consistent with USEPA Method 204 Permanent Total Enclosure Criteria (as set forth at 40 CFR Part 51, Appendix M, Test Method 204).
	5. Within sixty (60) days of completion of Emissions Compliance Testing, the Permittee shall submit to MassDEP for review and approval, a parametric monitoring program, including fan speeds as COPs for the capture of pollutants, and records verifying that the PCS is continuously maintained under negative pressure.
	6. The Permittee shall submit a detailed monitoring plan for the required temporary continuous emissions monitoring system (TCEMS) and data acquisition and handling system(s) (DAHS). The TCEMS shall monitor VOC concentration on each of the two exhaust stacks. The TCEMS shall be certified in accordance with 40 CFR 60, Appendix B, Performance Specification 8. The detailed monitoring plan for the TCEMS and DAHS shall be submitted to MassDEP NERO BAW for review and approval at least 180 days prior to the start-up of the required PCDs.
	7. The Permittee shall submit a semi-annual report detailing the amount of material processed by the shredder and resulting emissions each month, and the total amount processed on a 12-month rolling basis. The semi-annual reports shall be submitted no later than January 30 and July 30 for the previous six months respectively. The Permittee shall also submit to MassDEP actual emissions data to demonstrate compliance with emission limits contained in Table 2 above. The report shall include emissions data for all pollutants contained in Table 2 for both monthly and twelve month rolling periods.
	8. The Permittee shall report to the Permit Chief within one (1) business day, if the PLC indicates any PCD(s) is/are operating outside of the COP(s) setpoint range(s) for greater than one hour. The notification shall include which PCD(s) is/are operating outside acceptable COPs set point range(s), the date and time that the setpoints were outside the acceptable range(s), a description of the event, and the date and time the PCD(s) resumed operating within the acceptable range(s).

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<b>Table 5</b>	
<b>EU</b>	<b>Reporting Requirements</b>
1	9. The Permittee shall submit, at least sixty (60) days prior to Emissions Compliance Testing, a copy of the “as-built” plans for the PCS.
	10. The Permittee shall submit, at least sixty (60) days prior to emissions compliance testing, a Standard Operating and Maintenance Procedures (SOMP) for the PCS and PCDs. The SOMP shall include but is not limited to, inspection and maintenance checklists. Any updated versions of the SOMP shall be submitted for MassDEP review and approval at least sixty (60) days prior to the occurrence of a significant change. MassDEP NERO BAW must approve of significant changes to the SOMP prior to the SOMP becoming effective.
Facility-wide	11. The Permittee shall submit, within ninety (90) days of the issuance of this Conditional Plan Approval, a copy of the inspection and maintenance checklist to be used for engineering controls and best management practices that has been developed to ensure that equipment employed to control PM, as contained in the Particulate Matter Control Plan. The checklist shall provide for biweekly inspections and repairs as necessary in order to ensure that all particulate and dust control equipment is operating properly and best management practices are working effectively.
	12. The Permittee shall submit, for MassDEP review and approval, a sound survey protocol at least thirty (30) days prior to commencing the sound survey.
	13. The Permittee shall submit a written report, describing the results of the required sound survey, within forty-five (45) days after its completion.
	14. The Permittee shall submit the required PM reports in accordance with the approved PM Control Plan.
	15. The Permittee shall submit all information required by this Conditional Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	16. The Permittee shall notify the Permit Chief by telephone 978-694-3200, email <a href="mailto:nero.air@state.ma.us">nero.air@state.ma.us</a> , or fax 978-694-3499 as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to the Permit Chief within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	17. The Permittee shall submit any updated versions of the Scrap Acceptance Policy to MassDEP NERO BAW no later than thirty (30) days prior to the occurrence of a significant change.



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<b>Table 5</b>	
<b>EU</b>	<b>Reporting Requirements</b>
Facility-wide	18. The Permittee shall report annually to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), that did not require Plan Approval.
	19. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Conditional Plan Approval within thirty (30) days of MassDEP's request.
	20. The Permittee shall submit for MassDEP review and approval, a stack emission pretest protocol, at least sixty (60) days prior to emission testing, for emission testing as defined in 310 CMR 7.13 and in Table 3 "Monitoring and Testing Requirements" above.
	21. The Permittee shall submit a final stack emission test results report, within sixty (60) days after emission testing, for emission testing as defined in 310 CMR 7.13 and in Table 3 "Monitoring and Testing Requirements" above.

**Table 5 Key:**

EU = Emission Unit

NERO = Northeast Regional Office

BAW = Bureau of Air and Waste

USEPA = United States Environmental Protection Agency

CMR = Code of Massachusetts Regulations

CFR = Code of Federal Regulations

SOMP = standard operating and maintenance procedures

DAHS = data acquisition and handling system

MassDEP = Massachusetts Department of Environmental Protection

PCS = pollution capture system

VOC = volatile organic compounds

COPs = critical pollution control device operating parameters

PTE = permanent total enclosure

PLC = programmable logic controller

TCEMS = temporary continuous emissions monitoring system

VOC = volatile organic compounds

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#### 4. **SPECIAL TERMS AND CONDITIONS**

A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

<b>Table 6</b>	
<b>EU</b>	<b>Special Terms and Conditions</b>
1	1. Within five hundred and forty (540) days of issuance of this Conditional Plan Approval, the Permittee shall complete the installation and commence continuous operation of the pollutant capture, control, and monitoring systems approved herein.
	2. Upon the completion of emissions compliance testing the Permittee shall only operate the shredder utilizing the PCS and all PCDs operating in accordance with the COPs. The PCS and all PCDs must be operating at their respective COPs prior to start-up of the shredder.
	3. The Permittee shall properly install, begin proper operation of, and thereafter properly and continuously operate and maintain at all times the pollution capture system, venturi scrubbers, regenerative thermal oxidizers, packed bed scrubbers, temporary continuous emissions monitoring systems, temperature monitoring systems and pollution control system monitoring devices and data acquisition and handling systems.
	4. The Permittee shall ensure that the operation of the emission unit and PCDs shall be conducted in accordance with all data and specifications submitted with the application under which this Conditional Plan Approval is issued unless otherwise stated herein or established in the SOMP based on compliance testing and approval by MassDEP NERO BAW.
	5. If any PCD(s) is/are operating outside of the COPs, the Permittee shall immediately investigate the cause(s) of the audible and visual alarm(s) indicating a possible issue with any PCD(s). If the issue(s) causing the alarms cannot be resolved within sixty (60) minutes of the alarm condition(s), then the Permittee shall discontinue operation of the infeed conveyor and initiate a controlled shutdown of the shredder and shall not restart shredder operations until all PCDs are operating properly.

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<b>Table 6</b>	
<b>EU</b>	<b>Special Terms and Conditions</b>
1	6. The Permittee shall ensure that all monitoring equipment shall be installed, operated, calibrated, and maintained in accordance with manufacturer's recommendations. Additionally, the Permittee shall replace equipment on an as-needed basis and/or in accordance with manufacturer's recommendations unless modified in accordance with the SOMP. The Permittee shall develop a quality assurance and quality control plan (QA/QC) for all process and air pollution control monitoring and recording equipment.
	7. The Permittee shall install sampling ports before and after each PCD. The Permittee shall submit within one hundred and eighty (180) days of the date of this Conditional Plan Approval, an emissions test port plan indicating the locations, orientation and size of each test port to MassDEP NERO BAW for review and approval.
	8. The COPs incorporated in the SOMP must be determined at the time of compliance emissions testing, and must be approved by MassDEP. The Permittee shall use and maintain COPs as "direct compliance" monitors. Direct compliance monitors generate data that legally documents the compliance status of the emission unit.
	9. If visible emissions exist for one (1) hour in excess of the emission limit contained in Table 2 above then the Permittee shall discontinue operation of the shredder infeed conveyor until compliance with the Table 2 visible emission limit is achieved or initiate a controlled shut down of the shredder.
Facility -Wide	10. The Permittee shall operate the Facility such that particulate matter and/or dust shall not migrate off-property.
	11. If visible emissions exist in excess of emission limit contained in Table 2 above for one hour, then the Permittee shall cease operation of the equipment or activity producing visible emission until corrective actions are completed and visible emissions are eliminated.
	12. The Permittee shall implement and adhere to all the requirements contained in the PM Control Plan.

**Table 6 Key:**

EU = Emission Unit

MassDEP = Massachusetts Department of  
Environmental Protection

BAW = Bureau of Air and Waste

PM = particulate matter

PCD = pollution control device

SOMP = standard operating and maintenance  
procedures

NERO = Northeast Regional Office

COPs = critical pollution control device operating  
parameters

PCS = pollution capture system

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- B. The Permittee shall install and use exhaust stacks with the following parameters as contained in Table 7 below for the Emission Unit that is regulated by this Conditional Plan Approval. All exhaust stacks shall be constructed consistent with good air pollution control engineering practices and all stacks shall discharge so they do not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including, but not limited to, rain protection devices known as “shanty caps” and “egg beaters.”

<b>Table 7</b>				
<b>EU</b>	<b>Stack Height Above Ground (feet)</b>	<b>Stack Inside Exit Dimensions</b>	<b>Stack Gas Exit Velocity Range (feet per second)</b>	<b>Stack Gas Exit Temperature Range (°F)</b>
1 (two identical stacks)	55	6 feet	~35	70-90 °F

**Table 7 Key:**

EU = Emission Unit

°F = Degree Fahrenheit

~ = approximately

C. Noise Impact Analysis:

A sound study was conducted as part of this non-major Comprehensive Plan Approval Application. The addition of the proposed air pollution control devices and associated equipment were included in this analysis. Abatement methods to be employed at the Facility include, but are not limited to enclosing the shredder inside a building with continuous strips of rubber conveyor belting material installed and maintained on the internal faces of the aluminum siding to protect the siding and attenuate sound, placing the 100 HP motor driven water pump that serves the air pollution control devices inside a building, and using variable frequency drive fans that are in-line units with inlet ducts from the venturi scrubbers and outlet ducts to the RTOs to reduce noise from the operation of this Facility. Table 8 below summarizes the results of the noise study conducted and the associated predicted sound impacts to locations surrounding the Facility based on modeling. Once the PCS and PCDs are constructed and are fully operational, the Permittee shall complete noise impact testing to confirm the accuracy of the predicted results as well as confirm that Facility operations do not cause a nuisance condition(s) as defined by MassDEP’s Noise Regulation. Additional

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noise mitigation may be required should it be determined that the Facility is causing a nuisance condition.

<b>Table 8 Predicted Noise Impacts</b>			
<b>Location</b>	<b>Ambient (L<sub>90</sub>, dBA)<sup>1</sup></b>	<b>Calculated Facility Noise Levels (L<sub>90</sub>,dBA)<sup>2</sup></b>	<b>Total Future Maximum Predicted at all times (L<sub>90</sub>,dBA)<sup>3</sup></b>
No. 1 – NW corner	71	78	73
No. 2 – NE corner	62	71	66
No. 3 – SE corner	61	70	69

**Table Notes:**

1. The lowest background sound levels (one hour) observed where the noise level is exceeded 90 percent of the time (L<sub>90</sub>), which is the level regulated by the MassDEP Noise Regulation and Noise Policy.
2. These values include the anticipated sound levels from the sorting equipment previously approved on April 28, 2016 (NE-15-019) and anticipated sound levels generated from the unenclosed shredder.
3. These values include the anticipated sound levels from the sorting equipment previously approved on April 28, 2016 (NE-15-019) and changes associated with the addition of the air pollution control devices and the enclosure of the shredder emission unit.

MassDEP Noise Regulation and Noise Policy also prohibits a “pure tone” condition, which is defined as when any octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by 3 decibels or more. A review of the sound analysis and associated documentation indicates the presence of a pure tone condition at one of the three locations monitored for lowest ambient sound pressure levels. The baseline sound survey identified an existing tonal condition for the 63 Hz octave band at location 3, but demonstrated that this existing pure tone is not caused by operations at the Facility.

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## **5. GENERAL CONDITIONS**

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and/or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Conditional Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Conditional Plan Approval, the Conditional Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Conditional Plan Approval if the construction work is not commenced within two years from the date of issuance of this Conditional Plan Approval, or if the construction work is suspended for one year or more.
- H. This Conditional Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Conditional Plan Approval is being violated.
- I. This Conditional Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Conditional Plan Approval conditions or after consideration of a written request by the Permittee to amend the Conditional Plan Approval conditions.

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- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Conditional Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Conditional Plan Approval, the latter shall govern.

## **6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT**

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

## **7. APPEAL PROCESS**

This Conditional Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Conditional Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Conditional Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts  
Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with

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the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Conditional Plan Approval, please contact Edward J. Braczyk by telephone at 978-694-3200, or in writing at the letterhead address.

Sincerely,

**This final document copy is being provided to you electronically by the  
Department of Environmental Protection. A signed copy of this document  
is on file at the DEP office listed on the letterhead.**

Edward J. Braczyk  
Permit Chief  
Bureau of Air and Waste

Amy E. LaPusata  
Environmental Engineer

Attachment 1—Particulate Matter Control Plan (December 2017)

ecc: [deb.oneil@ci.everett.ma.us](mailto:deb.oneil@ci.everett.ma.us)  
[david.butler@ci.everett.ma.us](mailto:david.butler@ci.everett.ma.us)  
MassDEP/Boston – Yi Tian  
MassDEP/NERO – Susan Ruch, Deputy Regional Director, e-mail: [susan.ruch@state.ma.us](mailto:susan.ruch@state.ma.us)  
MassDEP NERO – Martha Bolis, Ed Braczyk  
[kbegins@woodardcurran.com](mailto:kbegins@woodardcurran.com)  
  
cc: MassDEP NERO – Martha Bolis  
MassDEP NERO – Mary Persky



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## Attachment 1

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**Prolerized New England**  
**69 Rover Street, Everett, MA**  
**Particulate Matter Control Plan**  
**December 2017**

Potential particulate matter (PM) emission sources at the Everett facility include incoming material drop off, roadways, conveyor transfer points, stockpile management, ferrous and non-ferrous separation, and product load out. The potential to generate fugitive PM emissions varies depending on number of factors including the moisture content of the material, local weather conditions (precipitation, temperature, wind speed and direction), maintenance activities, stockpile size, maintenance of local haul roads, and extent of pile management activities. PM emissions are prevented to the extent practicable and those that cannot be prevented are controlled using a combination of engineering controls and best management practices (BMPs). The following are a summary of the wet suppression operation requirements and control measures to be taken to mitigate PM emissions at the respective source areas:

**Wet Suppression Operations**

Wet suppression operations shall consist of the dispensing of water via truck, mist turbines, spray guns, spray bars and/or other water distribution systems. Wet suppression operations noted below shall be utilized except during precipitation events or when freezing conditions would cause ice to accumulate and create unsafe and/or hazardous conditions.

- 1) PNE shall ensure that all water spraying equipment is installed, operated and maintained in accordance with manufacturer's recommendations.
- 2) PNE shall inspect on a daily basis all water spraying equipment prior to the commencement of metal shredding, material receiving, and material management activities.
- 3) PNE shall make the necessary repairs to any water spray system that is inoperable or malfunctioning to immediately return it to normal operation; if the system cannot be immediately repaired PNE will cease operation of the affected operation if fugitive PM is being generated at that location.

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- 4) PNE shall maintain records of all water spray systems routine maintenance and repair activities and times when rental equipment is employed. Records shall be completed and kept on site for a minimum of five years.
- 5) PNE shall identify and utilize equipment rental options in the event that dust suppression and/or water dispensing equipment is/are out of service.

**A) Materials Drop Off/Incoming Material**

- 1) PNE shall conduct visual inspections of every load of incoming material to ensure that loads containing excessive amounts of soil, ash or other types of PM are rejected and not allowed on the property.
- 2) PNE shall post and maintain signage visible to all delivery truck drivers requiring all trucks that enter the Facility must be clean. PNE shall ensure that all signage is free of debris and easily read, and shall be replaced or repaired on an as needed basis.
- 3) PNE shall ensure that all materials moved on-site, including truck unloading activities, are conducted in a manner to reduce PM emissions (e.g. dropped from the lowest possible height).
- 4) PNE shall conduct water spraying of stockpiles by mist turbines throughout the day, and water truck spraying of interior roadways at least 3 times daily.
- 5) PNE shall operate and maintain a water dispensing system to wet material on the conveyor belt prior to dropping into the shredder box, as to minimize PM and/or dust.
- 6) PNE shall operate and maintain a water spray system to wet materials to be processed prior to moving it from the in-feed stockpiles onto the conveyor belt feeding the shredder, or moving the materials to another location.

**B) Roadways**

- 1) PNE shall pave and maintain all internal haul roads.
- 2) PNE shall spray internal roads with clean water using a fine spray nozzle at least three (3) times daily.
- 3) PNE shall conduct sweeping activities at least three (3) times daily.
- 4) PNE shall maintain the trench drain located along the Facility ingress/egress gate.
- 5) PNE shall post speed limit signs of 10 miles per hour (mph) at the Facility and the speed limit shall be enforced by PNE management. PNE shall ensure that all signage is free of debris and easily read, and shall be replaced or repaired on an as needed basis.

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**C) Conveyor Transfer Points**

- 1) PNE shall maintain a cover on the non-ferrous raw conveyor that exits the shredder.
- 2) PNE shall maintain a removable cover over the magnetic drum separators.
- 3) PNE shall maintain covers and belt cleaners (scrapers) on conveyor belts at the Facility where fugitive dust is generated.
- 4) PNE shall maintain shrouding at the end of non-ferrous raw conveyor belt exiting the shredder.
- 5) PNE shall repair or replace any damaged covers, scrapers and shrouding as necessary.
- 6) PNE shall operate and maintain a water misting unit at end of the ferrous shred conveyor.

**D) Stockpiled Material**

- 1) PNE shall spray water on the stockpiles via water truck, mist turbines, water guns and spray nozzles as needed, but no less than 3 times daily.
- 2) PNE shall minimize the number of times material is handled to the extent feasible.
- 3) PNE shall minimize the shredder feedstock pile by shredding the maximum amount possible each day given scheduled and unscheduled maintenance and conduct frequent shipment and/or removal of finished products and/or shredder residue /Propat to minimize finished products stockpiles.
- 4) PNE shall install a portable mist turbine for shearing and torch cutting operations to minimize PM from this operation by April 15, 2018.
- 5) PNE shall operate and maintain a 3-sided hopper and cover where the non-ferrous raw material is loaded onto a conveyor to the Non- Ferrous Recovery Building.

**E) Ferrous and non-ferrous separation**

- 1) PNE shall operate and maintain the 3-sided covered bays for metal product storage.
- 2) PNE shall maintain and repair the windscreen at the Propat storage bin.

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- 3) PNE shall cover the vibratory screens located outside of the Non-Ferrous Recovery Building by May 31, 2018.
- 4) PNE shall operate and maintain Z-box cyclones according to manufacturer' instructions.

**F) Product Load-out**

- 1) PNE shall apply water to ferrous shred pile during product load-out operations to minimize PM migration.
- 2) PNE shall operate and maintain a 3 sided hopper with cover to be used for non-ferrous product load out in cargo containers.
- 3) PNE shall employ conveyors that can be boomed up and down during product load-out operations to minimize windblown debris.
- 4) PNE shall spray water on material during product load-out operations.

**Additional PM Control Requirements**

- 1) PNE shall establish a hotline number and email for people to contact in reference to complaints of PM, dust and/or nuisance conditions. This hotline number and email address shall be posted on signs that are easy to read, and are located at several points around the exterior of the 69 Rover Street Facility.
- 2) PNE shall designate a person(s) at the Facility to oversee the implementation of this plan, to address any PM and/or dust migration issues, and to be the contact person(s) for the hotline number and email address for PM, dust, and/or nuisance complaints.
- 3) PNE shall develop and implement an inspection checklist to be completed, including both on-property and off-property observations, on a bi-weekly (2 times per month) basis to determine the efficacy of the PM control measures employed for stockpiled materials, roadways, ferrous and non-ferrous separation, and product load out. The inspection checklist shall include documentation of PM control methods that are successful as well as recommendations for changes and improvements to make best efforts to eliminate PM migration off-property. Records of the bi-weekly inspections shall be kept on site for a minimum of five years.
- 4) Checklists established by PNE to verify that this PM Control Plan is effective at controlling PM and/or dust shall be submitted to MassDEP. The checklists shall include, but not limited to:
  - description of off-property observation points,

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- discussion regarding modifications to the observation schedule due to environmental conditions (e.g. change in inspection schedule due to heavy rain event)
  - the name of contact person(s) in responsible for implementing this PM Control Plan should PNE's inspector observe issue(s) with PM, dust, engineering controls, administrative controls and/or Best Management Practices.
- 5) PNE shall also conduct evaluations of the Engineering Controls and Best Management Practices implemented at the Facility to be submitted to MassDEP NERO BAW for review. These evaluations will be used to determine the effectiveness of the PM and/or dust control activities, ensuring that all particulate matter and dust is controlled at the Facility and is not migrating off-property. These evaluations shall be conducted every six months until all Engineering Controls and Best Management Practices have been installed and/or implemented and have been in place for at least six months. These evaluations shall include any recommendations to change Best Management Practices and/or Engineering Controls to achieve PM and/or dust control.

### **Contingency Plan**

Should PM and dust control measures approved herein are found to be inadequate upon implementation, PNE shall identify the origin of the source(s) of the PM and/or dust and take necessary actions to resolve issues as quickly as possible and notify MassDEP NERO Bureau of Air & Waste Permit Chief by telephone 978-694-3200 or email [nero.air@state.ma.us](mailto:nero.air@state.ma.us) as soon as possible but no later than one business day after discovery of fugitive PM and/or dust issues longer than one hour in duration which result in off-site migration of PM. Also, PNE shall propose additional permanent measures to mitigate PM/dust emissions and timeframes for completing the proposed actions.

### **Training of Personnel and Contractors**

PNE shall develop and conduct training activities for PNE personnel, along with training of contractors whose activities on-site have the potential to generate fugitive dust. PNE shall provide a copy of the training materials to MassDEP. PNE shall maintain records of personnel and contractors who have been trained in PM and dust controls implemented at the Facility. If additional PM and/or dust control measures are put in place, or if there are changes that need to be made to this approved PM Control Plan, PNE shall conduct additional training, update training material, update inspection checklists, and other documentation to reflect these changes.

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### **Recordkeeping Requirements**

- 1) PNE shall keep copies of all inspection checklists and associated maintenance and repair work performed as part of this PM Control Plan for a minimum of five years.
- 2) PNE shall also maintain records regarding PM and dust control training received by PNE personnel and contractors. These records shall include the date(s) the training was given, the person(s) who gave the training, and the names of people attending the training.
- 3) PNE shall maintain records for a minimum of five years regarding the observation of any visible emissions generated at the Facility, including the date, time, origin, magnitude, duration and any other notable characteristics of the visible emission(s); and details including but not limited to the date and time corrective action(s) taken and specifics of those corrective actions.
- 4) PNE shall maintain records of the date and time of any complaint(s) related to PM and/or dust, and the date and time action(s) were commenced and resolved to remedy the issues shall also be maintained for a minimum of five years.
- 5) PNE shall maintain records of inspections at abutting properties to evaluate effectiveness of control measures for a minimum of five years.

### **Reporting Requirements**

PNE shall submit a report to MassDEP Northeast Regional Office, 205A Lowell Street, Wilmington, MA 01887, Attention: BAW Permit Chief, once every six months detailing the Best Management Practices and Engineering Controls completed to date, status of PM control measures not yet completed, and the overall status of implementing the PM Control Plan. In addition, PNE shall include in this report the results of each six month evaluation detailing the effectiveness of the Engineering Controls and Best Management Practices employed at the Facility to make best efforts to eliminate PM and/or dust migration. These reports shall be due on January 30 and July 30 of each year.

### **Changes to Approved PM Control Plan**

Should PNE determine that a change(s) is/are needed in the approved PM Control Plan, then PNE shall make proposed changes in writing to MassDEP Northeast Regional Office, 205B Lowell Street, Wilmington, MA 01887, Attention: BAW Permit Chief.